Leveraging the Latest Community Guide Physical Activity Recommendation

Chris Kochtitzky, MSP

Senior Advisor, CDC's Physical Activity and Health Branch

DNPAO Webinar

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The findings and conclusions in this presentation do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Agenda

- **Background on the Task Force and it's Community Guide**
- **Interventions to create activity-friendly routes to everyday destinations: Recent guidance from the Community Guide**
  - Process recap
  - Review decisions and deliberations on the available evidence
  - CPSTF Recommendation
- **Moving from Evidence to Action**

U.S. Community Preventive Services Task Force

- The Task Force is an independent, nonfederal, unpaid panel of public health and prevention experts that provides evidence-based findings about community programs to improve health.

- The Task Force issues findings based on systematic reviews of effectiveness and economic evidence.

- These recommendations are collected in the Guide to Community Preventive Services (The Community Guide) - a resource to help decision-makers select interventions

https://www.thecommunityguide.org/task-force/what-task-force
https://www.thecommunityguide.org/about/our-methodology
https://www.thecommunityguide.org/about/about-community-guide

The Guide to Community Preventive Services (The Community Guide)

- Credible source of systematic reviews and evidence-based findings of the independent Community Preventive Services Task Force
- Focuses on population-based interventions
  - Communities
  - Health care systems
- Recommendations consider applicability of the evidence to U.S. settings and populations
  - Resource to help U.S. decision-makers select interventions to match their resources, settings, and populations

Requirements for Task Force Conclusions on Intervention Effectiveness

Based on a Standardized, Explicit, Transparent Systematic Process for Identifying, Evaluating, and Documenting the following:

A Body of Evidence
(Health or Health-Linked Outcomes)

+

A Demonstration of Effectiveness

Consistent Impact

+

Meaningful Magnitude of Effect

Final CPSTF assessment considers additional evidence or information from the review which may adjust their conclusion and recommendation

CPSTF Finding Options

Recommend

- Strong Evidence
- Sufficient Evidence

Recommend against

- Strong Evidence
- Sufficient Evidence

Insufficient evidence

Unable to determine effectiveness

Primary Audiences and Uses of Community Guide Recommendations

- The Task Force has identified as its primary target audience **any persons** involved in **planning, funding, and implementing population-based services and policies** to **improve health** at the state and local levels.
- The scope of users fitting this description has grown over the years to include urban planners and transportation engineers, for instance.
- Users weigh the Guide's recommendations, which are based on completed research, against other factors such as (1) the match between a community's needs and resources; (2) prior experience; (3) local preferences; and (4) political will.

https://www.thecommunityguide.org/sites/default/files/publications/ajpm-Developing-the-Guide-to-Community-Preventive-Services.pdf

www.thecommunityguide.org

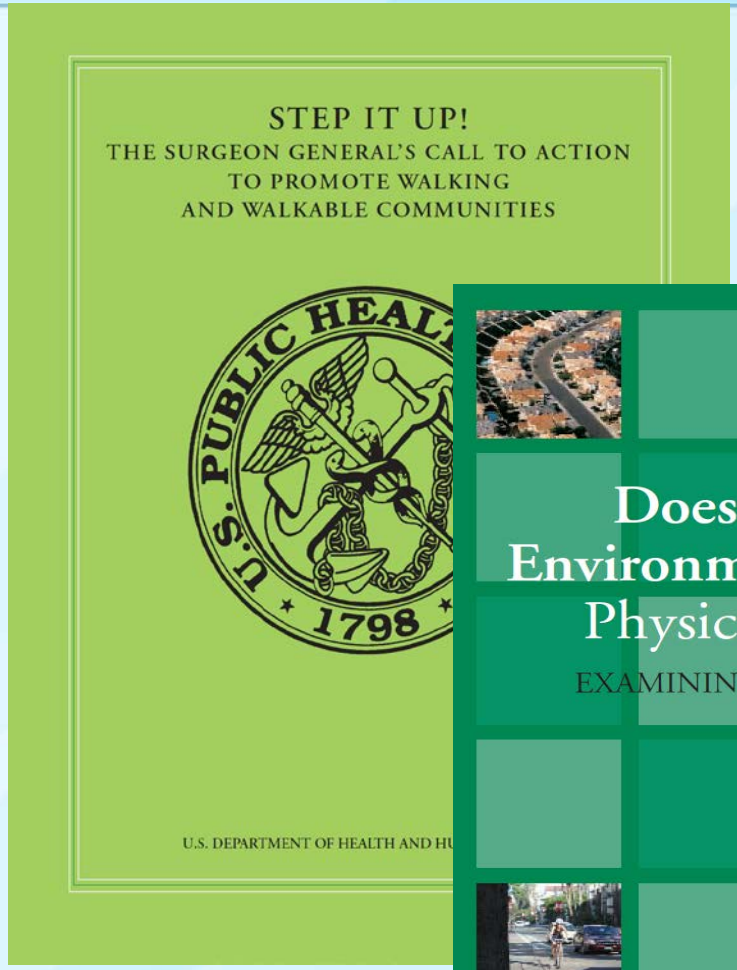
Calls for Research into Environmental Contributions to Physical Inactivity

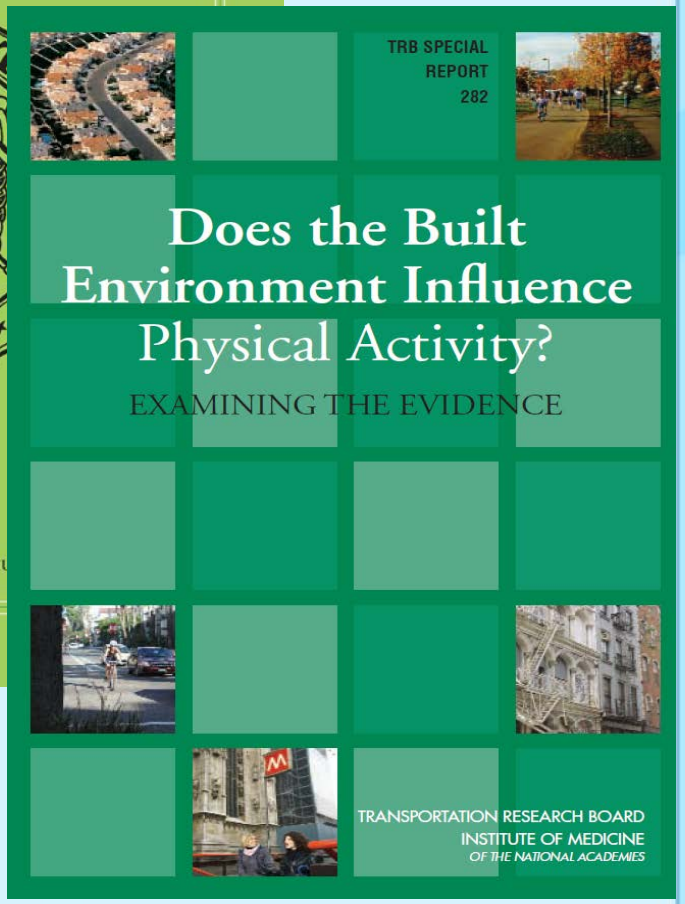
"Research is needed to identify and advance the most effective approaches to increase walking and to understand how effectiveness varies on the basis of community characteristics."

SG's Call to Action

"The committee urges a continuing and well-supported research effort in this area…priorities for this research include interdisciplinary approaches and international collaboration bringing together the expertise of the public health, physical activity, urban planning, and transportation research communities"

Transportation Research Board





U.S. Dept of Health and Human Services. Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities. Washington, DC:, DHHS, Office of the Surgeon General; 2015. https://www.surgeongeneral.gov/stepitup

National Research Council (US). Committee on Physical Activity, Land Use, & Institute of Medicine (US). (2005). *Does the Built Environment Influence Physical Activity?: Examining the Evidence*. Transportation Research Board. http://onlinepubs.trb.org/onlinepubs/sr/sr282.pdf

Latest Review of Evidence for Built Environment Interventions to Increase Physical Activity

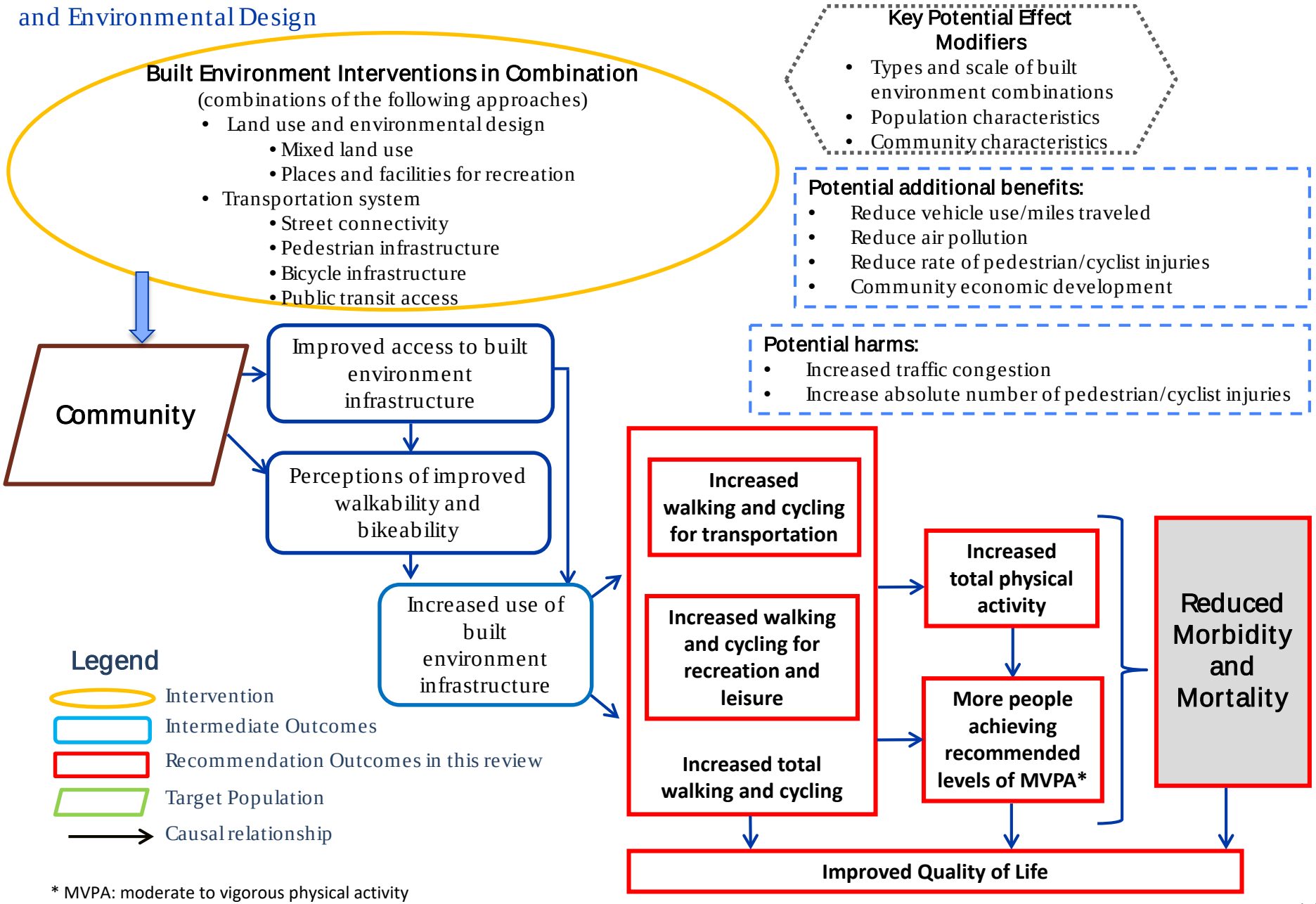
- The current ***systematic review*** updates earlier work (2005)
  - Street-scale interventions to increase physical activity
  - Community-scale interventions to increase physical activity

- Policy, design, and program changes in a community to make physical activity easier or more accessible including:
  - **Transportation** (walking/cycling for shopping, dining, commuting)
  - **Recreation** (leisure, exercise)

Interventions to Increase Physical Activity:

Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design

Analytic Framework: Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design



* MVPA: moderate to vigorous physical activity

CPSTF Recommendation Statement

- The Community Preventive Services Task Force recommends built environment strategies that combine one or more interventions to improve pedestrian, bicycle, or transit transportation systems with one or more land use and environmental design interventions based on sufficient evidence of effectiveness in increasing physical activity.

- This is based on findings from **longitudinal studies** of people exposed to coordinated interventions modifying the built environment (**16 studies**), as well as evidence from additional **cross-sectional comparisons** showing that combinations of activity-supportive built environment characteristics are associated with higher levels of transportation-related physical activity, recreational physical activity, and total walking among exposed people (**74 studies**).

https://www.thecommunityguide.org/sites/default/files/assets/PA-Built-Environments.pdf

Systematic Search and Assessment of the Evidence

- Over 61,000 papers were identified worldwide.
- The final Task Force recommendation is based on evidence from 90 included intervention studies.
- These studies used diverse designs, assessed and compared different combinations of interventions or existing built environment characteristics, and evaluated longitudinal changes or cross-sectional differences for a wide range of physical activity outcomes.

Geographic Location of Included Studies

Scope of Studies Identified

- Patterns of **neighborhood environment attributes** related to physical activity across 11 countries.
- Retrofitting the suburbs to increase walking: Evidence from a **land-use-travel** study
- **Cycling to work** in 90 large American cities: new evidence on the role of bike paths and lanes
- The influences of the built environment and **residential self-selection** on pedestrian behavior: evidence from Austin, TX
- A cross-sectional study of demographic, environmental and parental barriers to **active school travel among children** in the U.S.
- Neighborhood **land use diversity and physical activity in adjacent parks**.

Moving from Evidence to Action

Examples of Intervention Components

Pedestrian and Bicycle Transportation System Interventions	
Intervention Component	**Selected Examples**
Street pattern design and connectivity	Designs increasing street connections and creating multiple route options, shorter block lengths
Pedestrian infrastructure	Sidewalks, trails, traffic calming, intersection design, street lighting and landscaping
Bicycle infrastructure	Protected bicycle systems, bicycle lanes, trails, traffic calming, intersection design, street lighting and landscaping
Public transit infrastructure & access	Expanded transit services, times, locations, and connections

https://www.thecommunityguide.org/sites/default/files/assets/PA-Built-Environments.pdf

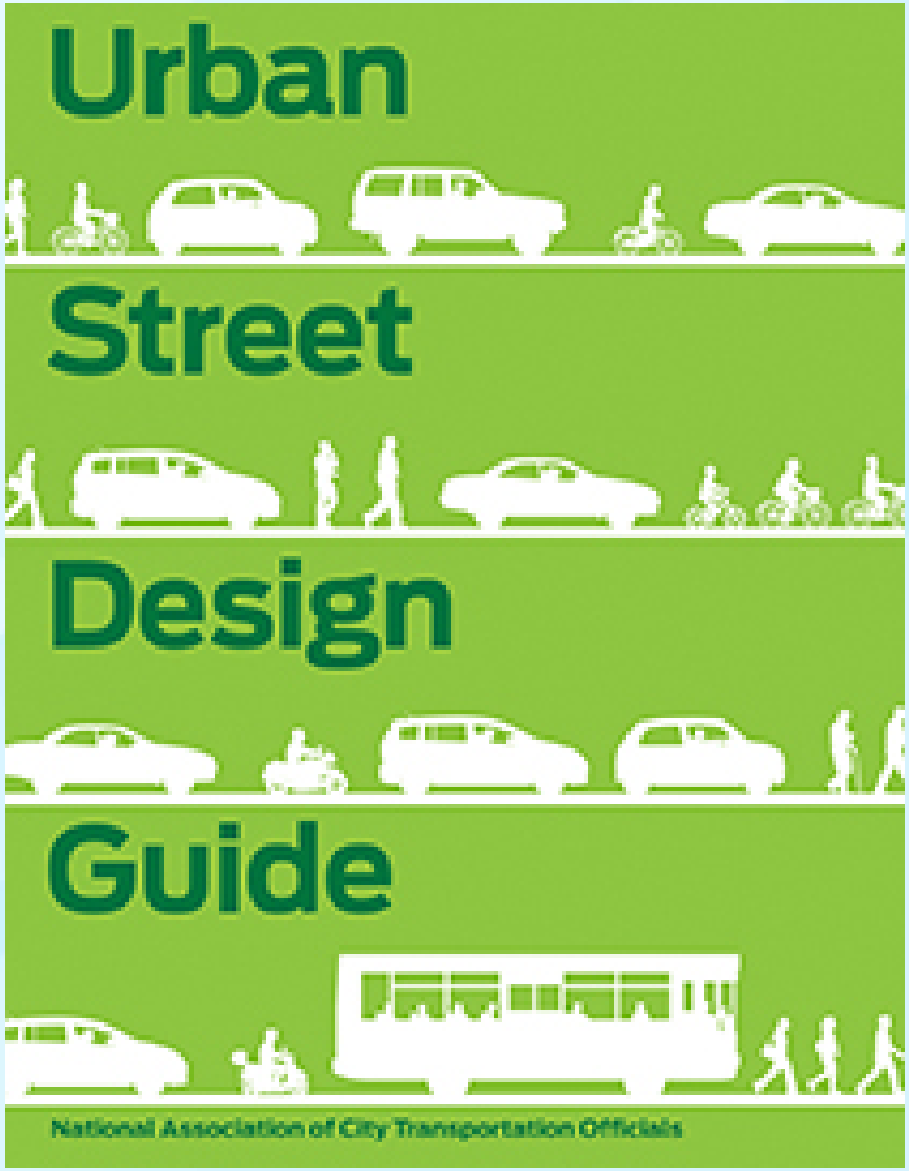
Examples of Intervention Components

Land Use and Environmental Design Interventions	
Intervention Component	**Selected Examples**
Mixed land use	Residential, commercial, cultural, institutional, or industrial uses of land whose functions are physically and functionally integrated, providing a balanced mix
Policies increasing residential density	Smart growth communities and new urbanist designs, relaxed planning restrictions in appropriate locations to reduce sprawl, sustainable compact cities and communities with affordable housing
Proximity to community or neighborhood destinations	Community destinations such as stores, health facilities, banks, and social clubs that are accessible and close to each other
Parks and recreational facility access	Public parks, public recreational facilities, private fitness facilities

https://www.thecommunityguide.org/sites/default/files/assets/PA-Built-Environments.pdf

Street Design

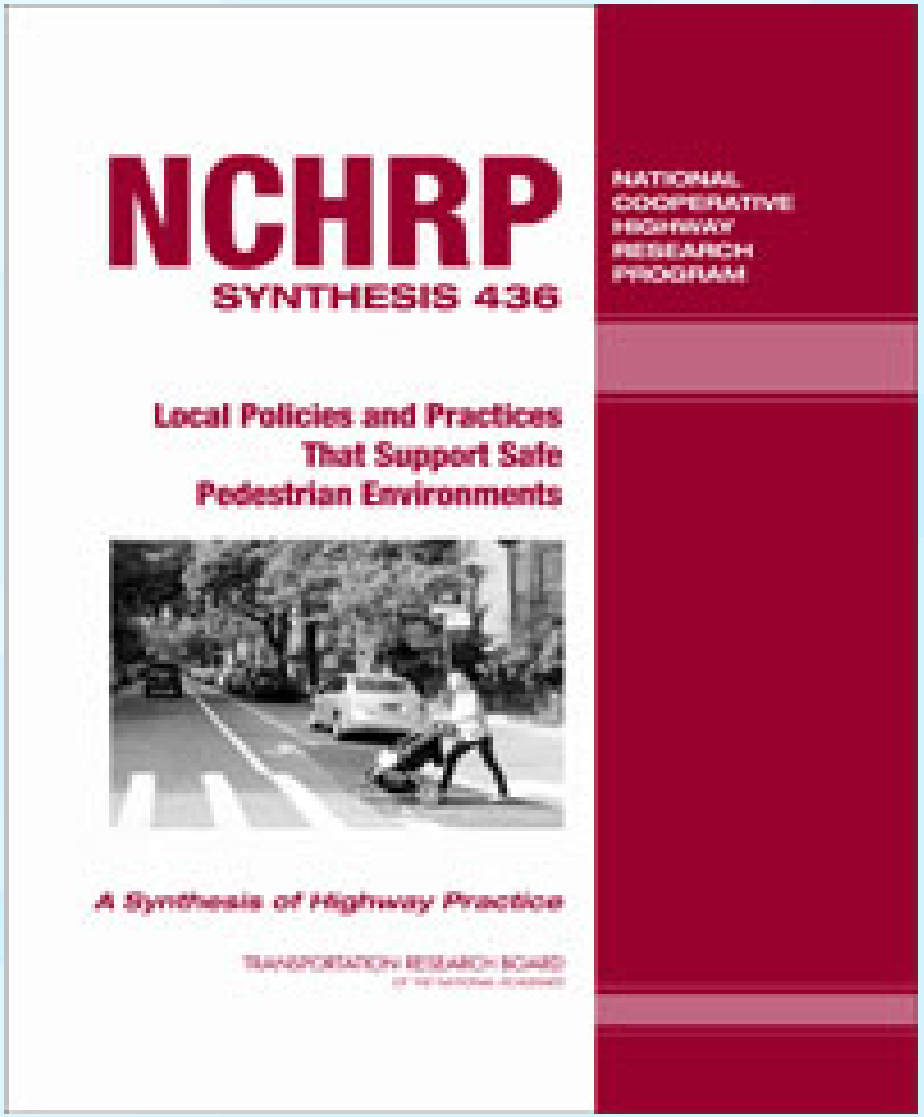
- Streets of every size can be reimagined and reoriented to prioritize safe driving and transit, biking, walking, and public activity
- Streets can be changed. Transportation engineers can work flexibly within the building envelope of a street. Many city streets were created in a different era and need to be reconfigured to meet new needs.
- Streets are public spaces. Streets play a much larger role in the public life of cities and communities than just thoroughfares for traffic.



https://nacto.org/publication/urban-street-design-guide/

Pedestrian Infrastructure

- Communities that have been most successful at providing pedestrian transportation options recognize that a safe and usable pedestrian environment requires more than meeting minimum standards.
- High-quality pedestrian environments are places where pedestrians are anticipated, encouraged, and will congregate.
- Highlighted communities have adopted new policies, ordinances, and guidelines to support land development patterns and streets that serve multiple transportation modes.

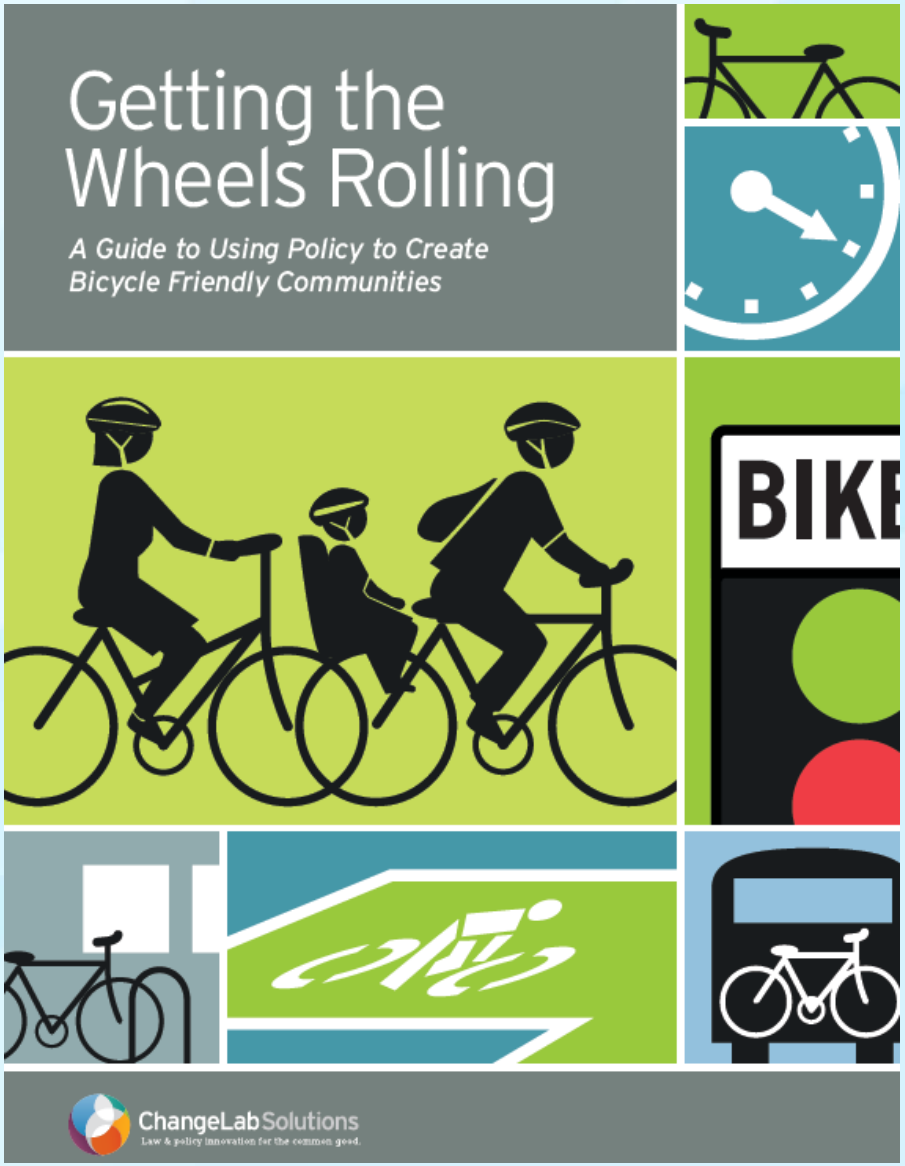


http://www.trb.org/Publications/Blurbs/167603.aspx

Bicycle Infrastructure

There are four key requirements that must be in place before people will choose to get around by bicycle:

- **Safety**: Travel by bicycle must feel sufficiently safe;
- **Convenience**: Travel by bicycle must be sufficiently convenient;
- **Acceptability**: Travel by bicycle must be viewed as a normal and socially acceptable form of transportation;
- **Access**: People must have access to bicycles when they need them.



http://www.changelabsolutions.org/sites/default/files/Getting_the_Wheels_Rolling_Toolkit-FINAL_20130823_0.pdf

Transit Infrastructure

- This toolkit contains practical and innovative measures to help integrate transit planning with local land use planning.
- The guide includes best practices, guidance, success stories and useful techniques aimed at providing planners at the regional, corridor, and local levels with ideas on how to integrate transit-supportive development and transit investment.
- This guide seeks to go beyond just highlighting case studies by providing a link between the regional, corridor, and local planning processes for integrating land use and transit and examining regions that have successfully developed and integrated plans.

https://www.transit.dot.gov/funding/funding-finance-resources/transit-oriented-development/planning-transit-supportive

HCPAT is an evaluation tool that planners, public health professionals, and community advocates can use to assess the strength of health-related policies in their comprehensive plans. The evaluatio

Mixed Land Uses

HCPAT is an evaluation tool that planners, public health professionals, and community advocates can use to assess the strength of health-related policies in their comprehensive plans.

- Complete Streets: transit/pedestrian/bike-friendly, alternative transportation, vehicle miles traveled (VMT), traffic/trip reduction, transportation demand management (TDM), parking, injury prevention, and safe routes to school.

- Complete Neighborhoods: smart growth, infill, transit-oriented-development (TOD), affordable housing, mixed-use development, mixed-income neighborhoods, parks, recreation, open space, limiting alcohol and tobacco access, public safety, and schools.

Welcome to the Healthy Comprehensive Plan Assessment Tool.

HCPAT was created with a variety of potential users in mind. Public agency staff such as health department officials, planners, or transportation engineers may wish to use HCPAT as part of an internal healthy community policy evaluation process. Or, community coalitions like childhood obesity task forces or pedestrian and bicycle groups may wish to lead an evaluation.

http://healthyplanning.org/

Parks and Recreation

- Barriers limiting walkability to parks are dependent and unique to each specific community; however, distance and physical barriers are the most common obstacles in building safe routes to parks.
- The purpose of this report is to identify the essential elements of a safe route to a park.
- Additionally, it assesses the barriers to walkability, determines the key stakeholders responsible for creating safe routes to parks, identifies strategies on building awareness on the importance of walkability, and recognizes current initiatives on improving safe routes to parks.

https://www.nrpa.org/contentassets/f768428a39aa4035ae55b2aaff372617/park-access-report.pdf

Supportive Policy Activities

Relevant Types of Policy and Code Interventions

- Master Planning
- Zoning & Land Use Law (Form-based, Context Sensitive, etc.)
- Complete Streets Policy
- Safe Routes to School Policy
- School Siting Policy
- Active Street and Building Design Guides
- Economic Development Incentives

Master Planning & Health

- General (Master) Plan - official statement of a municipal legislative body setting policies concerning future physical development
- Clarifies the relationships between physical-development policies and social goals.

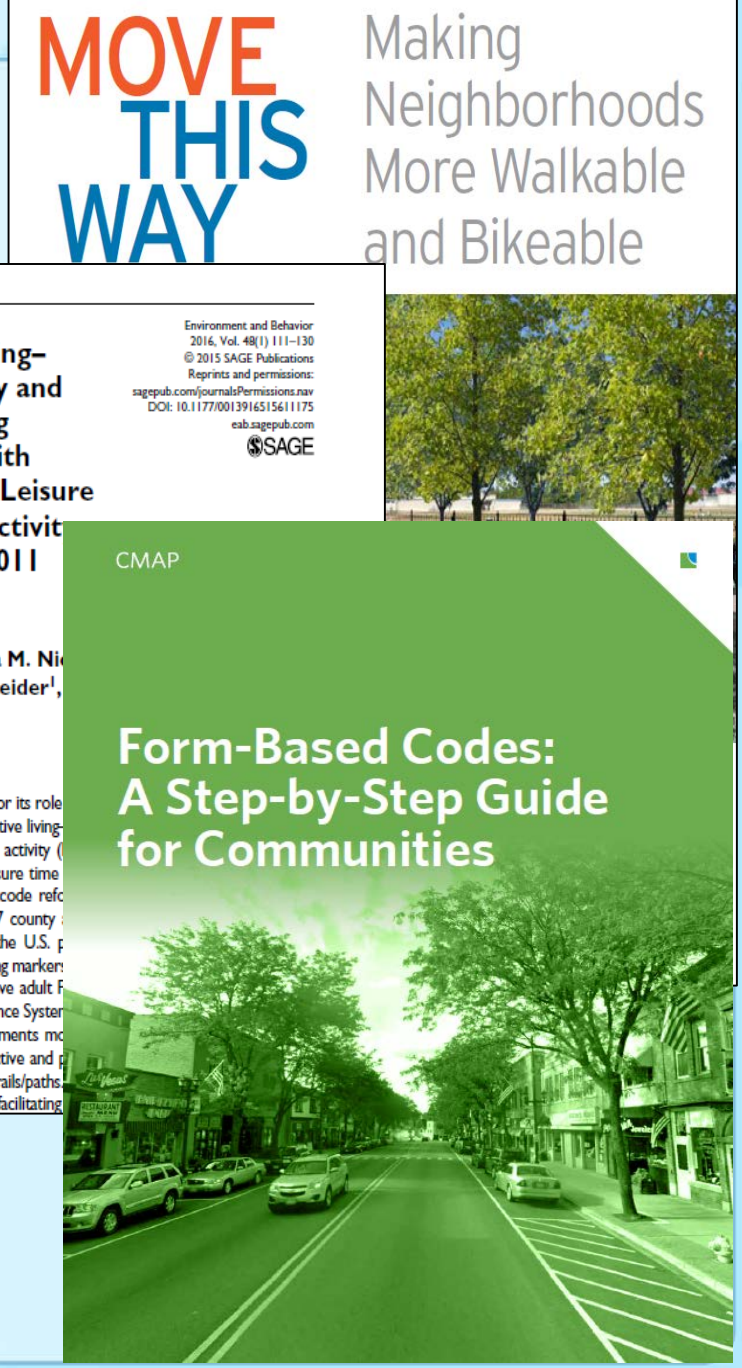
The award winning ***Temple Terrace 2040 Plan***, for example, includes Mobility Goals such as:

- ***Multi-Modal Districts*** which assign secondary priority to auto mobility and primary priority to a safe, comfortable, pedestrian environment
- ***Mobility Fee Exemption Areas*** incentivizing traffic calming, bicycle facilities, and transit
- ***Pedestrian-Bicycle-Transit Connectivity***
- ***Mixed-Use, Mixed Income Districts***

http://www.changelabsolutions.org/publications/comp-plan-language-cs
http://www.planhillsborough.org/city-of-temple-terrace-2040-comprehensive-plan/
https://www.planning.org/publications/report/9026901/

Land Use Law & Zoning

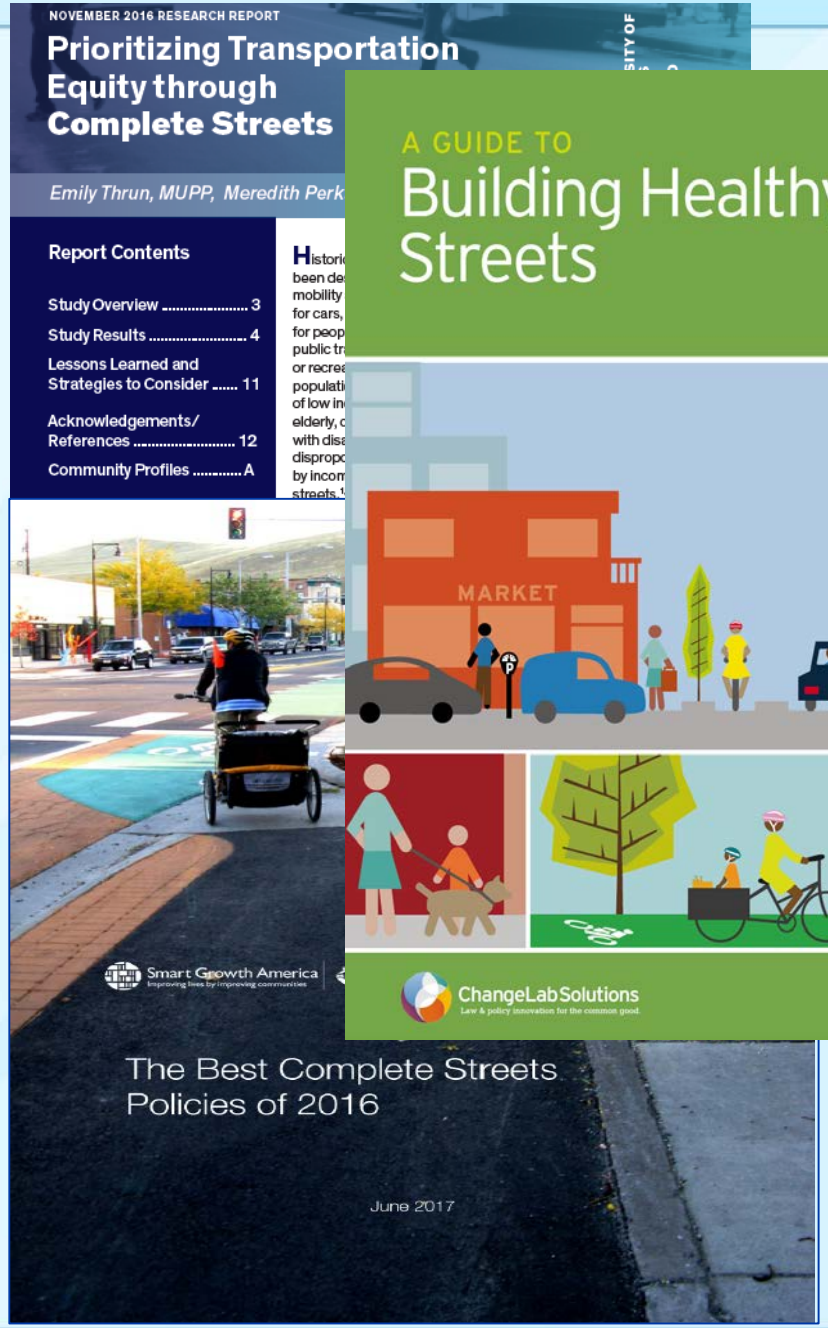
- Research has documented that zoning can promote adult physical activity through requirements for mixed land uses, active and passive recreation, bike parking, and bicycle-pedestrian trails/paths
- Land use/zoning code can include:
  - *Zoning Codes* that set standards for the widths of streets and sidewalks, the location and frequency of crosswalks, and the presence of pedestrian medians and bike lanes.
  - *Subdivision Codes* determining the creation of combined residential and commercial development.
  - Some communities are even developing *Unified Development Codes* that combine zoning, subdivision, *and* building codes.



http://www.changelabsolutions.org/sites/default/files/MoveThisWay_FINAL-20130905.pdf
http://journals.sagepub.com/doi/abs/10.1177/0013916515611175
http://www.cmap.illinois.gov/documents/10180/10715/CMAP+Form+Based+Codes+Guide.pdf/4ff3758c-13dd-4c54-a647-d17c0129186d

Complete Streets Policy

- A Complete Streets policy directs officials, including transportation planners, engineers, and public works staff to ***Design, Operate, Construct, and Maintain*** streets that are safe for every user.
- Complete Streets policies can help to provide a ***Framework for Shifting the Status Quo*** of street design from car-centric to being designed such that streets are safe, designed, and built for all modes of travel.
- These policies can ensure ***Equitable Allocation*** of monetary resources, as well as specifying a certain percentage of funding be allocated to projects in ***Areas with Vulnerable Populations***



http://www.ihrp.uic.edu/files/EquityBrief-21nov2016.pdf

http://www.changelabsolutions.org/sites/default/files/Building_Healthy_Streets_FINAL_20160630.pdf

https://smartgrowthamerica.org/resources/the-best-complete-streets-policies-of-2016/

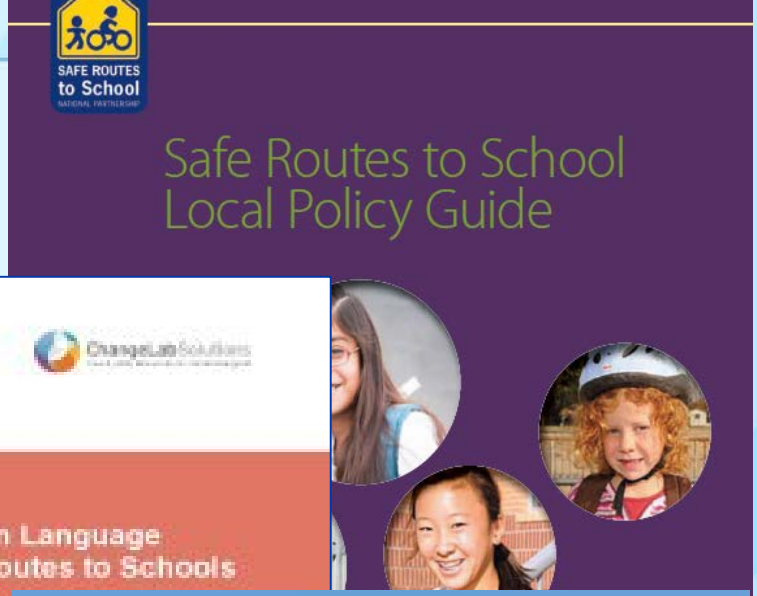
North Carolina Complete Streets Planning & Design Guide Example:

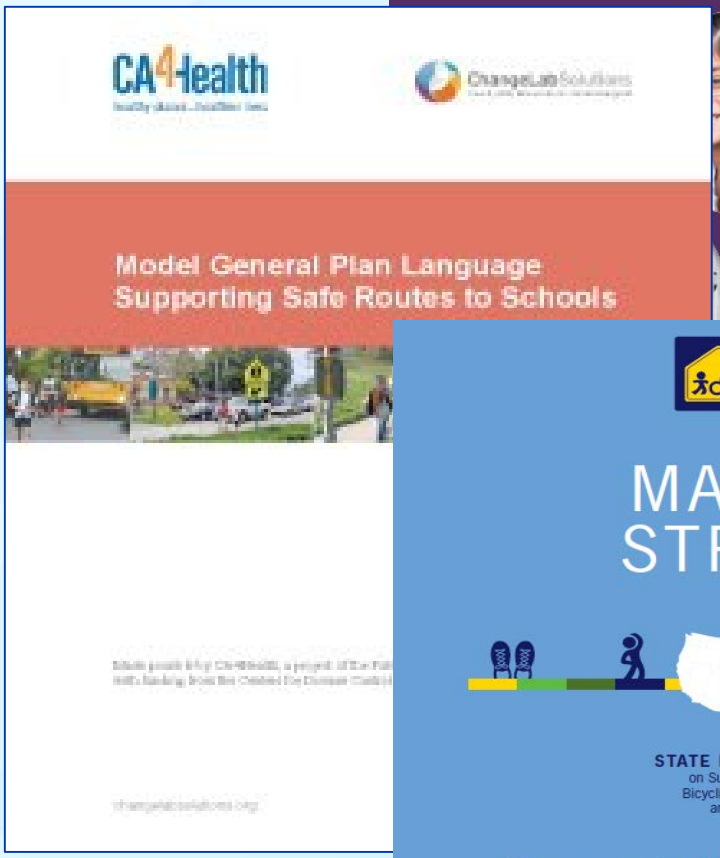
Covering Urban to Rural and everything in Between

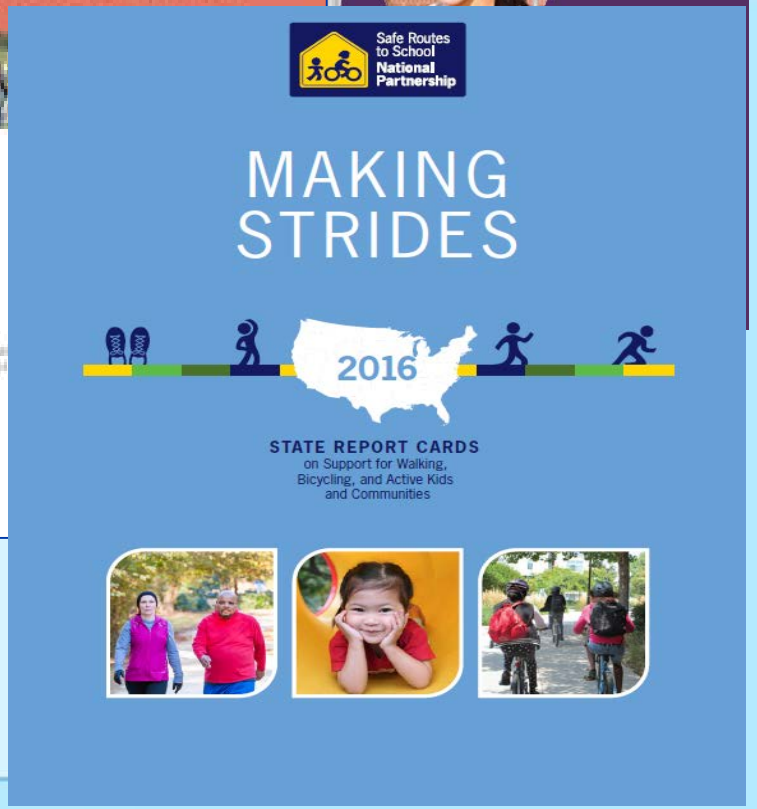
http://www.completestreetsnc.org/wp-content/themes/CompleteStreets_Custom/pdfs/NCDOT-Complete-Streets-Planning-Design-Guidelines.pdf

Safe Routes to School Policy

- There is no one policy that makes walking/biking completely safe for kids
- it is about changing priorities on how we address transportation demand and land use, which requires a comprehensive approach of political support, ***Coordinated Transportation and Land Use Policies***, enabling programs, adequate funding, implementation champions, competent agency staff, and ***Clear Technical Guidance***.
- In many states, local communities require state authorization to act on various elements of a Safe Routes to School program. Consequently, states have a serious responsibility to enact ***Supportive State Policy and Practice***.







http://www.saferoutespartnership.org/sites/default/files/pdf/Local_Policy_Guide_2011.pdf
http://www.changelabsolutions.org/publications/SRTS_general-plans
http://www.saferoutespartnership.org/sites/default/files/resource_files/072616_sr2s_statereport_2016_final.pdf

Economic Development Incentives

- There is an entire industry—***Community Development***—with annual resources in the tens of billions of dollars that is ***in the 'ZIP-Code-Improving' Business***.
- Public health data can ***Demonstrate the Health Impact*** of proposed development projects, help redevelopment agencies ***Prioritize those Projects*** that have the greatest potential to improve health.
- Redevelopment agencies are sometimes constrained by limitations and the communities in which they work don't always support their endeavors—partnering with public health can ***Provide More Credibility.***

http://www.buildhealthyplaces.org/content/uploads/2015/10/making_the_case_090115.pdf
http://www.changelabsolutions.org/publications/healthier-redevelopment
http://www.changelabsolutions.org/sites/default/files/How_to_Use_Economic_Development_Resources-ENGLISH_FINAL_2009-rebranded2015.pdf

Real World Examples Grid

https://www.cdc.gov/physicalactivity/community-strategies/index.htm

Level of cost, complexity, or scale

	Activity-Friendly Routes				Everyday Destinations			
Real-World Example	Street Pattern Design and Connectivity	Pedestrian Infrastructure	Bicycle Infrastructure	Public Transit Infrastructure and Access	Mixed Land Use	Increased Residential Density	Proximity to Community Destinations	Parks and Rec Facility Access
The city of El Paso, TX created a **walking route** between the Union Plaza District and the Downtown Arts District. These **destinations of cultural and economic activity** were previously divided by a locked parking lot that prohibited public and pedestrian access.	√	√					√	
A neighborhood in St. Louis, MO reduced average vehicle speed by using traffic calming techniques in a busy area served by four bus stops. This improved **access to buses** during the day, which connected residents to **community destinations.**		√		√			√	
In Weslaco, TX, students, school officials, and the city public works department partnered to **paint a new crosswalk** to **connect the school** to the community and the surrounding neighborhood.		√					√	
In Los Angeles, CA, the Watts neighborhood designed a visitor's center at the train station in a historic building along with a **network of walking paths with public art** to promote pedestrian traffic between the metrorail public transit stop and cultural sites.		√					√	
With the mayor, more than 100 community volunteers in Cuba, NM constructed or improved 9.5 **miles of trails with landscaping** including shade trees, benches, parking areas, and signage. Each trail attracts different users—two trails **connect the village** to the Santa Fe National Forest.		√					√	√
The city of Hernando, MS obtained grant funding to **revitalize an old road** connecting the middle and high schools that had been blocked off for years. This new pathway opened a **safe route to school** and allows more residents to use a newly surfaced track.	√	√					√	√
In Atlanta, GA, the BeltLine is converting abandoned railway into a combination of **trails, parks, light rail transit, high-density** residential buildings, and commercial development. Expected to eventually cover 22 miles of pathway, the BeltLine will **connect 45 neighborhoods** and Atlanta's council districts.	√	√	√	√	√	√	√	√
To improve public access to the waterfront in Houghton, MI, this remote city in the Upper Peninsula gradually acquired **a stretch of shoreline property** and replaced industrial ruins with parks, marinas, and paved bicycle/pedestrian trails which now **connect the city center** to parks and residential districts.	√	√	√				√	√

For more information about the Community Preventive Services Task Force recommendation, visit www.thecommunityguide.org/findings/physical-activity-built-environment-approaches and www.cdc.gov/physicalactivity/community-strategies

Dissemination Activities at CDC

- The CPSTF recommendation supports a number of current CDC initiatives including:
  - Active People, Healthy Nation
  - State and local grant programs designed to use Policy, Systems, and Environmental (PSE) Interventions
  - Conference presentations to APHA, APA, etc.

ACTIVE PEOPLE, HEALTHY NATION

Five Action Steps

Health Equity

1. DELIVER
Physical Activity Programs that Work

2. MOBILIZE
Physical Activity Partners

3. MESSAGE
Active Lifestyles

4. TRAIN
Leaders for Action

5. DEVELOP
Technologies, Tools, and Data that Matter

CREATING AN ACTIVE AMERICA, TOGETHER
ACTIVE PEOPLE, HEALTHY NATION℠

Coordination Team for the Physical Activity Review Updates

External Partners

- Ross Brownson (Washington U in St. Louis)
- Carlos Crespo (Portland State University)
- Greg Heath (UT at Chattanooga)
- Ken Powell (Retired)
- Jim Sallis (UC San Diego)

Task Force Members

- Shiriki Kumanyika (UPenn)
- Tracy Orleans (RWJF)
- Jamie Chriqui (UI-Chicago)

Consultant for Built Environment Review

- Anna Ricklin (American Planning Assoc.)

CDC/NIH Partners

- David Brown (DNPAO)
- Jackie Epping (DNPAO)
- Tom Schmid (DNPAO)
- Chris Kochtitzky (DNPAO)
- Rachel Ballard (NIH)

Community Guide Staff Team

- Renée Skeete Alston
- Jeffery Reynolds
- David Hopkins
- Timothy Levengood
- Danielle Ryan
- Kelly Mattick

Questions?